



European  
Unmanned  
Vehicle  
Systems  
Association

**Furthering The Introduction Of UAVs/ROA  
Into Civil Managed Airspace**

## **UCARE PROGRAMME UPDATE**

**Peter van Blyenburgh**

**EURO UVS**

**86, rue Michel-Ange**

**75016 Paris**

**France**

**Tel.: 33-1-46.51.88.65**

**Fax: 33-1-46.51.05.22**

**[pvb@euro-uvs.org](mailto:pvb@euro-uvs.org)**

**[www.euro-uvs.org](http://www.euro-uvs.org) & [www.ucare-network.org](http://www.ucare-network.org)**

Report Documentation Page			Form Approved OMB No. 0704-0188		
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE <b>02 SEP 2003</b>		2. REPORT TYPE <b>N/A</b>		3. DATES COVERED <b>-</b>	
4. TITLE AND SUBTITLE <b>Furthering The Introduction Of UAVs/ROA Into Civil Managed Airspace UCARE Programme Update</b>				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>EURO UVS 86, rue Michel-Ange 75016 Paris France</b>				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release, distribution unlimited</b>					
13. SUPPLEMENTARY NOTES <b>See also ADM001676, UAV 2002 Conference &amp; Exhibition., The original document contains color images.</b>					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT <b>UU</b>	18. NUMBER OF PAGES <b>13</b>	19a. NAME OF RESPONSIBLE PERSON
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>			



## FEDERATING & COORDINATING ACTION

Proposal  
To  
EC

### Thematic Network Proposal

March 2001

EURO UVS submitted a proposal for the financing of a European Thematic Network (re: UAV Airworthiness & ATM) to the European Commission.

This proposal federated:

50 Corporate Participants - 12 countries

37 Observers - 12 countries (European & non-European)

July 2001

EURO UVS received a negative reply to its request for funding from the European Commission.

Sept 2001

Based on the consensus arrived at during the preparation of the network proposal, and encouraged by the participants & observers, EURO UVS decided to continue the initiative as a multi-national EURO UVS programme (UCARE).



## UAVs: Concerted Actions for REgulations



### OBJECTIVE

Develop recommendations with the aim to facilitate the establishment of rules & regulations allowing the introduction of civil/commercial & military UAVs/ROA into civil managed airspace, regardless of borders.

### STRATEGY

Federate the international UAV community within a dedicated framework to create the required basis for issuing a consensual policy & competence standards.

### PARTICULARITIES

- Dual (military, civil/commercial) inputs/use;
- Incorporates recommendations from Eurocontrol, FAA, JAA, NATO, WEAO and national CAAs;
- Can be tasked by Eurocontrol, FAA, JAA, NATO, WEAO and national CAAs to deal with Specific Tasks;
- Incorporates findings of national Working Groups;
- Represents principal UAV stakeholders;
- Financed by the Participants;
- Multi-national & intercontinental approach not dominated by a single country, company or type of UAV.





## **PARTICIPANTS**

### **Corporate Entities**

Industry, R&D organizations, organizations supplying services with or for UAVs), governmental entities (military & civil), industry associations, international organizations (military & civil, e.g. NATO, WEAO, Eurocontrol, FAA, JAA).

### **From**

Australia, Austria, Canada, France, Germany, Italy, Israel, Japan, South Africa, Spain, Sweden, Switzerland, UK, USA

## **CONTRIBUTORS**

### **Non-Corporate Entities**

Representatives of military & civil gvmt organizations (incl. Min. of Def. agencies, departments, services), international military organizations (NATO & WEAO), national civil aviation authorities, international organizations e.g. DG Transport, Eurocontrol, FAA, JAA, International Federation of Airworthiness, universities & governmental R&D organizations, that can significantly contribute.

### **From**

All countries



## WHY THESE COUNTRIES?



### Europe

France  
Germany  
Italy  
Spain  
Sweden  
Switzerland  
UK

- The EURO UVS Power-Base.
- The **driving force** behind UCARE.
- Significant national UAV industry.
- Desire to fly UAVs in **civil managed** airspace.

Israel

- Elbit is teamed with Thales Defense, UK
- Experience flying **military** UAVs

### Far East

Australia  
Japan

- Significant national UAV industry & **EURO UVS membership**.
- Experience flying UAVs for **commercial** purposes in **civil managed** airspace.
- Positive attitude of CASA Australia.

### Africa

South Africa

- Significant national UAV industry & **EURO UVS membership**.
- Experience flying **military** UAVs for non-military purposes in **civil managed** airspace.

### N. America

USA  
Canada

- **Partnership** agreement with AUVSI.
- Significant national UAV industry & **EURO UVS membership**.
- Desire to fly UAVs in **civil managed** airspace.





## WHAT ARE THE DELIVERABLES?

**Consensual** International Recommendations  
Relative to a UAV Regulation Concept,  
Technical Proposals, Publications, Web Site

## WHO ELABORATE THE DELIVERABLES?

UCARE Participants

## WITH INPUTS FROM WHO?

Participants, Contributors, national civil & military aviation  
authorities, Eurocontrol, FAA, JAA, NATO & WEO

## WHO FORMATS THE DELIVERABLES?

EURO UVS + UCARE Steering Group +  
UCARE Steering Committees



## **HOW ARE THE DELIVERABLES ARRIVED AT?**

- **National Working Groups & Multi-National Discussion Forums**
- **International Work & Discussion Forums on “restricted” web site**
- **Accomplishing Tasks & Sub-Tasks, Special Tasks, and Specific Tasks (by Participants & Contributors)**
- **Exchange of information between national Working Groups during recommendation formulation**
- **2 Yearly Work Meetings at RMA in Brussels, Belgium**
- **1 Yearly General Meeting in Paris, France  
(back-to-back with EURO UVS’ yearly UAV conference)**
- **Publication of all recommendations on “open” UCARE web site**

**Necessity: Free flow & wide dissemination of information**





## **WHO RECEIVES THE DELIVERABLES?**

**Eurocontrol  
Joint Aviation Authorities (JAA)  
FAA  
National Military Authorities  
National Civil Aviation Authorities  
DG Transport    NATO    WEO  
Participants & Contributors**

**Invited to join  
UCARE  
as  
Contributors**

## **HOW ARE DELIVERABLES DISSEMINATED?**

**By email to tasking authorities  
EURO UVS & AUVSI Publications  
EURO UVS & AUVSI Web Sites & Direct Emailing  
EURO UVS & AUVSI Conferences**



## WHO FINANCES?



### GENERAL

- Organization & Coordination (infrastructure & time)
- EURO UVS (thru membership & participation fees, sponsors)

### WEB SITE

- Creation & maintenance (infrastructure & time)
- EURO UVS (thru membership & participation fees, publicity)
- Inputs (time)                      ■ Discussion Forum (time)
- Participants & Contributors   ■ Participants & Contributors

### WORK MEETINGS

Participation: Free

- Meeting venue = Royal Military Academy (RMA), Belgium
- Made available to EURO UVS by RMA
- Travel, hotel, substance, time
- Participants & Contributors

### TASKS & SPECIAL TASKS

- Time
- Participants

### SPECIFIC TASKS

- The authority tasking UCARE

### GENERAL MEETING

Participation =  
Delegate Fee  
(includes coffee, lunch,  
cocktails, meeting CD)

- Travel, hotel, substance, time
- Participants & Contributors
- Meeting venue, logistics, substance & cocktails
- Sponsorship of the yearly UAV conference & exhibition by international UAV industry (see: [www.euro-uvs.org](http://www.euro-uvs.org))
- General Meeting & UAV conference delegate fees



## Initially Suggested Core Group



**OVERALL COORDINATOR = EURO UVS**

**National Coordinators**

EURO UVS MEMBERS	Australia	Aerosonde, BAE Systems	To Be Ancd
	France & Spain	Dassault, EADS, EDT, INTA (Spain), Sagem, Thales (2)	EDT
	A & CH & D	Autoflug, BGT, EADS, EADS-Dornier, ESG, IABG, Limbach, RUAG Aerospace (CH), Schiebel (A), STN Atlas Elektronik	UAV-WG
	Japan	Fuji Heavy Industries, Kawada, Yamaha Motors, Ministry of Transport, Ministry of Agriculture-Aviation	Yamaha
	S. Africa	ATE, Kentron, Thales Advanced Engineering	ATE
	Sweden	Aerotech Telub, Civil Aviation Authority (LFV), Defense Materiel Admin. (FMV), Defense Research Inst. (FOI), Saab, Scandicraft	FMV/Saab
	UK & Israel	BAE Systems, Remote Group, Stasys, Thales Defense, UAV Engines Ltd, Elbit-Silver Arrow (IL)	UAVS
	USA	AAI Corp. ●, AeroVironment, BAI Aerosystems ●	AUVSI (ISG)
	USA	Adroit Systems ●, Boeing ●, General Atomics ●, Goodrich, Lockheed Martin ●, NASA, Northrop Grumman ●, NMSU	● Corporate AUVSI Members



# Current Participants & Contributors

**JUNE  
2002**

**OVERALL COORDINATOR = EURO UVS**

**National  
Coordinators**

<b>PARTICIPANTS</b>	<b>Australia</b>	Aerosonde, BAE Systems	<b>To Be Ancd</b>
	<b>France &amp; Spain</b>	Blyenburgh & Co, CAC Systèmes, Dassault, EADS, EDT, INTA (ES), Sagem, Thales Airborne Systems, Thales Communications	<b>EDT</b>
	<b>A &amp; CH &amp; D &amp; NL</b>	BGT, EADS MABU, EADS-Dornier, ESG, Dutch Space (NL), RUAG Aerospace (CH), Schiebel (A), STN Atlas Elektronik	<b>UAV-WG</b>
	<b>Japan</b>	Fuji Heavy Industries, Yamaha Motors, Japan UAV Association	<b>Yamaha</b>
	<b>South Africa</b>	Armcor, ATE, Kentron, Thales Advanced Engineering	<b>ATE/Kentron</b>
	<b>Sweden</b>	Defence Materiel Administration (FMV), Saab	<b>FMV/Saab</b>
	<b>UK &amp; Israel</b>	BAE Systems, Remote Group, QinetiQ-AT&E, Stasys, Thales Defence, UAV Engines Ltd, Elbit-Silver Arrow (IL), University of Glasgow, UAVS Trade Association	<b>UAVS</b>
	<b>USA &amp; Canada</b>	AAI Corp., AeroVations (C), BAI Aerosystems, Sierra Nevada Corp	<b>AUVSI (Alliance)</b>
<b>CONTRIBUTORS</b>	<b>Australia</b>	Civil Aviation Safety Authority	
	<b>Belgium</b>	Royal Military Academy	
	<b>Canada</b>	Transport Canada (CAA)	
	<b>France</b>	Ministry of Defence (DGA) Civil Aviation Authorities (DGAC)	
	<b>Japan</b>	Ministry of Transport Ministry of Agriculture-Aviation	
	<b>Netherlands</b>	Royal Netherlands Air Force Royal Netherlands Army	
	<b>Switzerland</b>	Swiss Air Force	
	<b>UK</b>	Ministry of Defence-DPRG Ministry of Defence-DPA	
	<b>USA</b>	Federal Aviation Administration NASA-ERAST USAF Flight Standards Agency	



## **International Co-operation: a Prerequisite for Success**



**The International UAV Community Is Called On To:**

**Support this EURO UVS-Instigated International Initiative**

**Form & Participate in National Working Groups**

**Contribute with your Expertise & Experience to  
Formulate Multi-National Consensual Opinions**



# **EURO UVS**

**86 rue Michel-Ange  
75016 Paris, France**

**Tel.: 33-1-46.51.88.65**

**Fax: 33-1-46.51.05.22**

**pvb@euro-uvs.org**

**[www.euro-uvs.org](http://www.euro-uvs.org)**

**[www.ucare-network.org](http://www.ucare-network.org)**

**Voice of & Forum for the International UAV Community**